1600

RAW SEQUENCE LISTING
PATENT APPLICATION: **US/09/673,302B**

DATE: 02/03/2003
TIME: 10:58:20

Input Set : **A:\sequene listing 1.25.txt**
Output Set: **N:\CRF4\02032003\I673302B.raw**

```
 3 <110> APPLICANT: Millennium Pharmaceuticals, Inc.
 4        Law, Deborah Ann
 5        Phillips, David R.
 7 <120> TITLE OF INVENTION: Transgenic Mice Expressing Mutant GP IIIa (beta-3) Protein
 9 <130> FILE REFERENCE: MPI98-148P1USM
C--> 11 <140> CURRENT APPLICATION NUMBER: US/09/673,302B
C--> 12 <141> CURRENT FILING DATE: 2001-03-23
14 <150> PRIOR APPLICATION NUMBER: US 60/115,516
15 <151> PRIOR FILING DATE: 1998-04-15
17. <150> PRIOR APPLICATION NUMBER: PCT/US99/08285
18 <151> PRIOR FILING DATE: 1999-04-15
20 <160> NUMBER OF SEQ ID NOS: 7
22 <170> SOFTWARE: PatentIn Ver. 2.1
24 <210> SEQ ID NO: 1
25 <211> LENGTH: 66
26 <212> TYPE: PRT
27 <213> ORGANISM: Mus musculus
29 <220> FEATURE:
30 <223> OTHER INFORMATION: Segment of GP IIIa beta-3 subunit
32 <220> FEATURE:
33 <223> OTHER INFORMATION: Xaa can be any amino acid and may be present or missing
35 <400> SEQUENCE: 1
36 Lys Leu Leu Leu Thr Thr His Asp Arg Lys Glu Phe Ala Lys Phe Glu
37   1               5                  10                  15
39 Glu Glu Arg Ala Arg Ala Lys Trp Asp Thr Ala Asn Asn Pro Leu Tyr
40               20                  25                  30
W--> 42 Lys Glu Ala Thr Ser Thr Phe Thr Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
43               35                  40                  45
W--> 45 Asn Ile Thr Tyr Arg Gly Thr Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
46           50                  55                  60
W--> 48 Xaa Xaa
49   65
52 <210> SEQ ID NO: 2
53 <211> LENGTH: 66
54 <212> TYPE: PRT
55 <213> ORGANISM: Mus musculus
57 <220> FEATURE:
58 <223> OTHER INFORMATION: Segment of GP IIIa beta-6 subunit
60 <220> FEATURE:
61 <223> OTHER INFORMATION: Xaa can be any amino acid and may be present or missing
63 <400> SEQUENCE: 2
64 Lys Leu Leu Val Ser Phe His Asp Arg Lys Glu Val Ala Lys Phe Glu
65   1               5                  10                  15
```

Does Not Comply
Corrected Diskette Needed

RAW SEQUENCE LISTING
PATENT APPLICATION: **US/09/673,302B**

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```
        67 Ala Glu Arg Ser Lys Ala Lys Trp Gln Thr Gly Thr Asn Pro Leu Tyr
        68             20                  25                  30
W--> 70 Arg Gly Ser Thr Ser Thr Phe Lys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
        71             35                  40                  45
        73 Asn Val Thr Tyr Lys His Arg Glu Lys Gln Lys Val Asp Leu Ser Thr
        74             50                  55                  60
        76 Asp Cys
        77     65
        80 <210> SEQ ID NO: 3
        81 <211> LENGTH: 66
        82 <212> TYPE: PRT
        83 <213> ORGANISM: Mus musculus
        85 <220> FEATURE:
        86 <223> OTHER INFORMATION: Segment of GP IIIa beta-1 subunit
        88 <220> FEATURE:
        89 <223> OTHER INFORMATION: Xaa can be any amino acid and may be present or missing
        91 <400> SEQUENCE: 3
        92 Lys Leu Leu Met Leu Ile His Asp Arg Arg Glu Glu Ala Lys Glu Glu
        93     1           5                   10                  15
        95 Lys Glu Lys Met Asn Ala Lys Trp Asp Thr Gly Glu Asn Pro Ile Tyr
        96             20                  25                  30
W--> 98 Lys Ser Ala Val Thr Thr Val Val Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
        99             35                  40                  45
W--> 101 Asn Pro Lys Tyr Glu Gly Lys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
        102            50                  55                  60
W--> 104 Xaa Xaa
        105    65
        108 <210> SEQ ID NO: 4
        109 <211> LENGTH: 66
        110 <212> TYPE: PRT
        111 <213> ORGANISM: Mus musculus
        113 <220> FEATURE:
        114 <223> OTHER INFORMATION: Segment of GP IIIa beta-5 subunit
        116 <220> FEATURE:
        117 <223> OTHER INFORMATION: Xaa can be any amino acid and may be present or missing
        119 <400> SEQUENCE: 4
        120 Lys Leu Leu Val Thr Ile His Asp Arg Arg Glu Phe Ala Lys Phe Gln
        121    1            5                   10                  15
        123 Ser Glu Arg Ser Arg Ala Arg Tyr Glu Met Ala Ser Asn Pro Leu Tyr
        124            20                  25                  30
        126 Arg Lys Pro Ile Ser Thr His Thr Val Asp Phe Thr Phe Asn Lys Phe
        127            35                  40                  45
W--> 129 Asn Lys Ser Tyr Asn Gly Thr Val Asp Xaa Xaa Xaa Xaa Xaa Xaa Xaa
        130    .   50                  55                  60
W--> 132 Xaa Xaa
        133    65
        136 <210> SEQ ID NO: 5
        137 <211> LENGTH: 66
        138 <212> TYPE: PRT
```

```
    139 <213> ORGANISM: Mus musculus
    141 <220> FEATURE:
    142 <223> OTHER INFORMATION: Segment of GP IIIa beta-2 subunit
    144 <220> FEATURE:
    145 <223> OTHER INFORMATION: Xaa can be any amino acid and may be present or missing
    147 <400> SEQUENCE: 5
    148 Lys Ala Leu Thr His Leu Ser Asp Leu Arg Glu Tyr Arg Arg Phe Glu
    149  1           5              10              15
W--> 151 Lys Glu Lys Leu Lys Ser Gln Trp Asn Asn Asp Xaa Asn Pro Leu Phe
    152         20              25              30
W--> 154 Lys Ser Ala Thr Thr Thr Val Met Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
    155         35              40              45
W--> 157 Asn Pro Lys Phe Ala Glu Ser Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
    158         50              55              60
W--> 160 Xaa Xaa
    161  65
    164 <210> SEQ ID NO: 6
    165 <211> LENGTH: 66
    166 <212> TYPE: PRT
    167 <213> ORGANISM: Mus musculus
    169 <220> FEATURE:
   ·170 <223> OTHER INFORMATION: Segment of GP IIIa beta-7 subunit
    172 <220> FEATURE:
    173 <223> OTHER INFORMATION: Xaa can be any amino acid and may be present or missing
    175 <400> SEQUENCE: 6
    176 Arg Leu Ser Val Glu Ile Tyr Asp Arg Arg Glu Tyr Ser Arg Phe Glu
    177  1           5              10              15
    179 Lys Glu Gln Gln Gln Leu Asn Trp Lys Gln Asp Ser Asn Pro Leu Tyr
    180         20              25              30
W--> 182 Lys Ser Ala Ile Thr Thr Thr Ile Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
    183         35              40              45
W--> 185 Asn Pro Arg Phe Gln Glu Ala Asp Ser Pro Thr Leu Xaa Xaa Xaa Xaa
    186         50              55              60
W--> 188 Xaa Xaa
    189  65
    192 <210> SEQ ID NO: 7
    193 <211> LENGTH: 65
    194 <212> TYPE: PRT
    195 <213> ORGANISM: Artificial Sequence
    197 <220> FEATURE:
    198 <223> OTHER INFORMATION: Description of Artificial Sequence: Consensus
    199        sequence for GP IIIa beta subunits
    201 <220> FEATURE:
    202 <221> NAME/KEY: VARIANT
    203 <222> LOCATION: (5)..(51)
    204 <223> OTHER INFORMATION: Xaa can be any amino acid and may be present or missing
    206 <400> SEQUENCE: 7
W--> 207 Lys Leu Leu Val Xaa Ile His Asp Arg Arg Glu Phe Ala Lys Phe Glu
    208  1           5              10              15
```

(handwritten annotation) (see p.4)
(handwritten annotation) (65) Xaa's are shown after location 51

RAW SEQUENCE LISTING   DATE: 02/03/2003
PATENT APPLICATION: **US/09/673,302B**   TIME: 10:58:21

Input Set : **A:\sequene listing 1.25.txt**
Output Set: **N:\CRF4\02032003\I673302B.raw**

```
W--> 210 Xaa Glu Xaa Xaa Xaa Ala Xaa Trp Xaa Xaa Xaa Xaa Asn Pro Leu Tyr
     211             20              25              30
W--> 213 Lys Xaa Ala Xaa Xaa Thr Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
     214         35              40              45
W--> 216 Asn Xaa Xaa Tyr Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
     217         50              55              60
W--> 219 Xaa
     220 65
```

RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 02/03/2003
PATENT APPLICATION: US/09/673,302B   TIME: 10:58:22

Input Set : **A:\sequene listing 1.25.txt**
Output Set: **N:\CRF4\02032003\I673302B.raw**

<u>Please Note:</u>
**Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.**

Seq#:1; Xaa Pos. 41,42,43,44,45,46,47,48,56,57,58,59,60,61,62,63,64,65,66
Seq#:2; Xaa Pos. 41,42,43,44,45,46,47,48
Seq#:3; Xaa Pos. 41,42,43,44,45,46,47,48,56,57,58,59,60,61,62,63,64,65,66
Seq#:4; Xaa Pos. 58,59,60,61,62,63,64,65,66
Seq#:5; Xaa Pos. 28,41,42,43,44,45,46,47,48,56,57,58,59,60,61,62,63,64,65
Seq#:5; Xaa Pos. 66
Seq#:6; Xaa Pos. 41,42,43,44,45,46,47,48,61,62,63,64,65,66
Seq#:7; Xaa Pos. 5,17,19,20,21,23,25,26,27,28,34,36,37,39,40,41,42,43,44,45
Seq#:7; Xaa Pos. 46,47,48,50,51,53,54,55,56,57,58,59,60,61,62,63,64,65

VARIABLE LOCATION SUMMARY   DATE: 02/03/2003
PATENT APPLICATION: US/09/673,302B   TIME: 10:58:22

Input Set : **A:\sequene listing 1.25.txt**
Output Set: **N:\CRF4\02032003\I673302B.raw**

<u>Use of n's or Xaa's(NEW RULES):</u>
Use of n's and/or Xaa's have been detected in the Sequence Listing.
Use of <220> to <223> is MANDATORY if n's or Xaa's are present.
in <220> to <223> section, please explain location of n or Xaa, and which
residue n or Xaa represents.

Seq#:1; Xaa Pos. 41,42,43,44,45,46,47,48,56,57,58,59,60,61,62,63,64,65,66
Seq#:2; Xaa Pos. 41,42,43,44,45,46,47,48
Seq#:3; Xaa Pos. 41,42,43,44,45,46,47,48,56,57,58,59,60,61,62,63,64,65,66
Seq#:4; Xaa Pos. 58,59,60,61,62,63,64,65,66
Seq#:5; Xaa Pos. 28,41,42,43,44,45,46,47,48,56,57,58,59,60,61,62,63,64,65
Seq#:5; Xaa Pos. 66
Seq#:6; Xaa Pos. 41,42,43,44,45,46,47,48,61,62,63,64,65,66
Seq#:7; Xaa Pos. 5,17,19,20,21,23,25,26,27,28,34,36,37,39,40,41,42,43,44,45
Seq#:7; Xaa Pos. 46,47,48,50,51,53,54,55,56,57,58,59,60,61,62,63,64,65

VERIFICATION SUMMARY   DATE: 02/03/2003
PATENT APPLICATION: **US/09/673,302B**   TIME: 10:58:22

Input Set : **A:\sequene listing 1.25.txt**
Output Set: **N:\CRF4\02032003\I673302B.raw**

```
L:11  M:270 C: Current Application Number differs, Replaced Application Number
L:12  M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:42  M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:1
L:42  M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:1
L:42  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:32
L:45  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:48
L:48  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:64
L:70  M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:2
L:70  M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:2
L:70  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:32
L:98  M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:3
L:98  M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:3
L:98  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:32
L:101 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:48
L:104 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:64
L:129 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:4
L:129 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:4
L:129 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:48
L:132 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:64
L:151 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:5
L:151 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:5
L:151 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:16
L:154 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:32
L:157 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:48
L:160 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:64
L:182 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:6
L:182 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:6
L:182 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:32
L:185 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:48
L:188 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:64
L:207 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0
L:210 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:16
L:213 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:32
L:216 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:48
L:219 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:64
```